

**53563 to 53590—Continued.****53570. CASSIA FISTULA L. Cæsalpiniaceæ.**

"Common in pioneer monsoon-deciduous forests throughout peninsular India and up to 4,000 feet in the Himalayas. Collected at Shankargarh, 25 miles south of Allahabad, India, April 8, 1921."

A moderate-sized tree with large, bright-yellow, fragrant flowers in lax, pendulous racemes 1 to 2 feet long. Common throughout India in the forest tracts in Trans-Indus on the hills near Peshawar, and ascends to 4,000 feet in the outer Himalayas. The red wood is beautifully mottled and streaked, hard, tough, is easily worked, and takes a fine polish, but is somewhat brittle and apt to crack. It is, however, very durable and is used for posts, plows, etc. The bark is used for tanning and dyeing, and red juice exudes from wounds in the bark, which hardens into a gum used like kino. The twigs and leaves are lopped for cattle fodder in Oudh and Kumaon. (Adapted from Brandis, *Forest Flora of India*, p. 164.)

For previous introduction, see S. P. I. No. 32316.

**53571. CLEODENDRUM INFORTUNATUM Gaertn. Verbenaceæ.**

"A component of survival woody vegetation of the plains, where human pressure is heavy. Collected at Shankargarh, 25 miles south of Allahabad, India, April 8, 1921."

An ornamental shrub 3 to 8 feet high, with white, sweet-scented flowers tinged with pink, followed by small black drupes seated on an enlarged pink calyx which sometimes reaches over an inch across the lobes when spread out. The large leaves, 4 to 10 inches long, are 3 to 8 inches wide. (Adapted from Cooke, *Flora of Bombay*, vol. 2, p. 432.)

**53572 and 53573. DIOSPYROS TUPRU Buch.-Ham. Diospyraceæ.**

A small tree with woolly branchlets and leathery leaves over 3 inches long. The smooth globose fruits are three-fourths of an inch in diameter. Native to the west Dekkan peninsula. (Adapted from Hooker, *Flora of British India*, vol. 3, p. 563.) Received as *Diospyros tomentosa* Roxb., which is now referred to *D. tupru*.

**53572.** "Collected at Manikpur, April 21, 1920."

**53573.** "A small tree characteristic in the pioneer monsoon-deciduous forests of peninsular India. Collected at Shivpuri (Sipri), Gwalior State, India, April 2, 1921."

**53574. ERIOLAENA HOOKERIANA Wight and Arn. Sterculiaceæ.**

"Collected near Manikpur, in the forests of the low Vindhya Mountains, April 21, 1920."

A south Indian shrub or small tree with cordate leaves and few-flowered, lax racemose cymes of long-peduncled flowers  $1\frac{1}{2}$  inches across. (Adapted from Cooke, *Flora of Bombay*, vol. 1, p. 131.)

**53575. EUPHORBIA ROYLEANA Boiss. Euphorbiaceæ.**

"A treelike Euphorbia on the rocky cliffs and talus slopes in the range of the Bauhinia monsoon-deciduous forest in the outer Himalayas, at altitudes of 3,000 to 5,500 feet. Collected at Dharassu, upper (Himalayan) Ganges Valley, June 1, 1920. I should think this would stand a climate about like that of Virginia."

A large shrub of cactuslike aspect attaining a height of 15 feet, with ascending 2 to 7 angled, thorny stems, 2 to 3 feet in girth. The sessile entire caducous leaves are inserted along the angles of the branches, and the yellow involucres, half an inch in diameter, are borne in sessile cymes. The milk contains a large amount of gutta-percha which has a sweet odor when fresh and is believed to be of value as a waterproofing material or as a paint for ships. (Adapted from Collett, *Flora Simlensis*, p. 446, and from Watt, *Commercial Products of India*, p. 531.)